

## IGNITION ACTUATION MECHANISM FOR PIEZOELECTRIC LIGHTER

### ABSTRACT

The present invention provides an ignition actuation mechanism for the manual actuator of a spark producing device in a fuel gas lighter to increase the actuation force immediately before spark discharge without unreasonably increasing the actuation force at the initial stages of movement of the manual actuator to reduce the chances of inadvertent ignition by small children, but maintaining good operability for adult users. Movement of the manual actuator is always resisted by a first elastic member while a second elastic member is positioned to resist movement of the manual actuator at a maximum of 30N to 50N after 60% or more of the total movement of the manual actuator required to produce a spark has occurred. Preferably the second elastic member is one or more flexible fingers molded from polyacetal resin.

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